The Innovation Growth Lab

Driving policy impact through experimentation, data and evidence



About the Innovation Growth Lab

IGL is a **global policy lab** that helps governments develop more effective policies to increase innovation and productivity.

We are on a mission to foster productive, sustainable, and inclusive economies through novel **policy ideas**, experimentation, data and evidence.

We work with **policymakers**, **researchers**, **practitioners** and **funders** to address key policy challenges in the fields of **science**, **innovation**, **entrepreneurship and business policies**.

To advance our mission, IGL brings together a network of leading governments and foundations who share our vision - the **IGL Partners**.



A global partnership



IGL is a global collaboration launched in 2014 in partnership with a group of governments and foundations. We are a **non-profit** organisation run by a core team based at **Nesta** and the **Barcelona School of Economics.**

We span the boundaries of policy and research. Our **IGL Partners** include leading institutions that support our mission, and the <u>IGL</u> <u>Research Network</u> has over **100 researchers** working on experimental research in this field, including the **IGL Scientific Committee** members:

Nick Bloom Stanford Business School | Dietmar Harhoff Max Planck Institute for Innovation & Competition | Karim Lakhani Harvard Business School | Josh Lerner Harvard Business School | Fiona Murray MIT Sloan | Mark Schankerman LSE | Scott Stern MIT Sloan | John Van Reenen LSE | Reinhilde Veugelers KULeuven | Heidi Williams Stanford University





Our global reach





Our approach to impactful policies

Policymakers often face challenges without clear solutions. Many options are considered but typically only one is taken forward. Under pressure to act, this is usually an existing approach.

Could other options have proved more effective? Could new solutions be explored? If so, how can we tell which ones work?

IGL helps policy institutions to **develop and test new ideas systematically**, putting in place structures to enable learning and drive impact.

Traditional approach

Launch a large programme without prior small-scale testing, with one design and the hope that it will work

Experimental approach

Start small, trial different designs systematically, learn what works to increase impact and scale it up

What we do



We are pioneers in bringing a data-driven, experimental approach to innovation and growth policy, and have built a global community of actors working in this space. To achieve our mission, we:

Help institutions become experimental

by supporting them to build skills to engage in evidence-based decision-making, from ideation to design and implementation



Drive experimental research

by conducting and supporting pilots and RCTs to develop and test ideas and help decide when it is time to adapt, scale or move on



Leverage data science & innovation mapping

by creating and using new data sources, methods, and visualisation tools and techniques to inform current and future policy



Analyse & influence policy

by researching and assessing relevant policy trends, and advocating for an experimental approach to policymaking



Convene learning communities

by creating opportunities for exchange and learning between policymakers, researchers, practitioners and funders



Make evidence more actionable

by collating, analysing and sharing policy ideas and evidence with partners and our policy and research networks

Our themes



| Policy areas | Programmes | | | | |
|--|--|--|---|---|--|
| Science & Innovation | Science and innovation funding | University- industry collaboration | Inclusive innovation | SME technology adoption | Future innovation agencies |
| Policy | Improving how science and innovation funding mechanisms are designed and managed | Bridging the gap between university and industry to accelerate science commercialisation and drive societal impact | Creating more inclusive innovation systems and recovering lost innovative potential | Exploring how policy can help businesses to adopt new technologies and practices to boost productivity and transition to net zero | Analysing and supporting strategic decision-making in innovation policy institutions |
| Entrepreneurship & Business Policy | | | -365 | | |

Our work and impact so far



- IGL has worked with **over 35 government agencies** across 5 continents to help them become more experimental.
- We've supported **over 70 trials in over 30 countries**, tackling a range of questions across innovation, entrepreneurship and growth policy.
- As a result of our campaign for experimentation funds, both the UK and the EU have launched **dedicated funding calls for experiments in innovation and growth policy**, legitimising the value of policy experimentation and supporting many organisations to run their first experiments.
- Through our capacity building work, funding and events, we have seeded a growing **global community** of policymakers, practitioners and researchers engaged in policy experimentation in this field.





The IGL team

Our core team are experts in innovation, entrepreneurship, productivity and business growth policy, with backgrounds in government and academia. We are experienced in advising government agencies and organisations aiming to become more experimental and data-driven, and have strong networks with policy and research communities.

Our wide range of skills include:

- → Experimental research methods
- \rightarrow Data science and innovation mapping
- \rightarrow Policy analysis and development
- \rightarrow Design and facilitation





How we collaborate with government agencies

How we can collaborate



IGL collaborates with governments around the world to make their science, innovation, entrepreneurship and business policies **more impactful** through new policy ideas, experimentation, data and evidence.

These collaborations can be structured in different ways:

- 1. **Becoming an IGL Partner**, accessing bespoke support and participating in collaborative projects and the network's peer learning and capacity building activities.
- 2. Capacity building, with a variety of formats, contents and levels.
- 3. **Project consulting,** on experimental programs, data science & Al, and other research and advisory activities.
- 4. **Experimentation funds** to identify, pilot and test new ideas and programmes.
- 5. Joining an IGL initiative and/or supporting projects focused on a specific policy challenge.



Becoming an IGL Partner

Why become an IGL Partner?

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By joining the IGL partnership our members benefit from:

- **Bespoke Support:** Access to tailored assistance to design experimental programmes, develop data science & Al projects, or build experimental cultures.
- **Knowledge Exchange:** Opportunities to learn from other government agencies in the IGL partnership, and tap into our broader policy and research networks.
- **Capacity Building:** Support in building and enhancing internal capabilities in experimentation, data science, and evidence-based policy-making.
- Collaborative Projects: Participate, shape and learn from IGL's portfolio of projects addressing common challenges shared among our government partners.

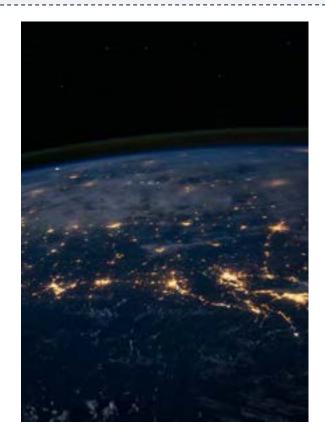
| Bespoke | Knowledge |
|----------|---------------|
| Support | Exchange |
| Capacity | Collaborative |
| Building | Projects |



Who can become an IGL Partner?

The IGL Partnership is open to organisations that:

- Design, conduct and/or evaluate policies and/or programmes related to science, innovation, entrepreneurship, business, industrial, and/or economic policy.
- Interested in building and/or supporting more experimental, data-driven and evidence-based cultures, capabilities, programmes and/or policies.
- National, regional and local government departments, ministries and agencies as well as foundations and international organisations.





How we work with IGL Partners

Exploration and discovery

Partnership support

Reflection and review

We start with activities to help us understand a partner's organisational context, and jointly identify challenges and priority areas for support. We provide a combination of individual and group support designed to help partners become more experimental and data-driven. As part of this, we look for opportunities to develop and run experimental projects. Regular review moments help to capture learning, and to identify actions that will help partners progress with their experimentation journey.

"One-to-one support has helped us to establish and frame ideas, and the IGL team is never lacking on suggestions and methods that could be employed. Working with the IGL on our Innovation Vouchers trial enabled us to run our first full-scale RCT, working with leading experts who we otherwise wouldn't have been able to engage with."

Dan Hodges, Deputy Director - Strategy, Innovate UK

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IGL Partners: Individual support

We meet regularly with each of our partners to explore how we can help them build more experimental capabilities within their organisation, adopt data science methods, share new ideas and research connections, and scope opportunities for projects. For example:



Netherlands Enterprise Agency

Building experimental skills

IGL helped Austria's FFG to launch and progress their experimentation journey, starting with small scale A/B tests through to running large trials on new innovation support programmes. This helped them build internal capacity to run experiments, and they secured €845,000 in EU funding through the <u>INNOSUP programme</u> to implement them.

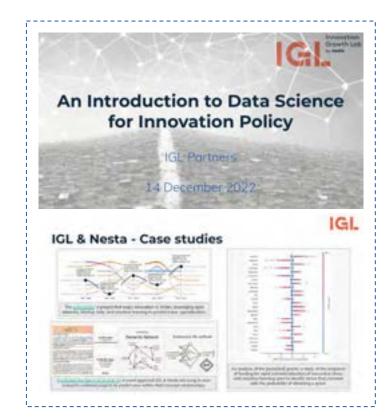
Al Pre-advice experiment

IGL is currently supporting the Dutch innovation and enterprise agency, RVO, combining analysis and data science techniques, to explore a machine learning (ML) tool in use by the agency with the goal of improving the model and its implementation.

IGL Partners: Peer learning and networking

IGL brings together a global community of policymakers, practitioners and researchers to learn, collaborate and explore new ideas with. We work with our partners to design and run peer learning activities to help them develop their knowledge, skills and networks. Examples of group support includes:

- → A regular working group on science and innovation funding processes
- → IGL 'inspiration sessions' that share insights from our work with partners and more widely. Recent sessions have focused on data science, design methods, university-industry collaborations and SME support
- \rightarrow 'Introduction to experimentation' workshops, and the opportunity to access bespoke training



IGL Partners: Advancing the state of the art

As a non-profit organisation, IGL seeks to **generate** evidence, build capacity and develop networks and resources that can advance good practice globally. The funding we receive from our partners also supports this work, which includes:

- → Developing initiatives addressing key policy challenges.
- → Building a global community of policymakers and researchers that contributes to advance this mission
- → Organising events and meetings, including the flagship IGL Global Conference
- → Producing toolkits and <u>guides</u> to help develop skills and knowledge
- → Collating new policy ideas, <u>experiments</u> and <u>evidence</u> in this field
- → Writing publications, blogs and newsletters that share policy-relevant insights and evidence, including our <u>monthly newsletter</u>



IGL Partnership practicalities

- All partners are represented at the **IGL Steering Board**, which meets quarterly and oversees our work.
- IGL Partners collectively decide what partner-wide activities and projects IGL undertakes.
- Partners make an **annual contribution** as part of a 3-year renewable agreement. This funds individual and group support activities, as well as IGL's public good work to develop and spread best practice.
- IGL is a **non-profit** initiative and all funding received is devoted to advancing its mission.





Other ways to collaborate



Capacity building

IGL has developed a range of workshops for organisations interested in learning how to improve their use of evidence, experimentation, data science and AI in their activities.

The content, level, duration, and format can be adapted to the organisation's needs.

Examples of modules include:

- Introduction to policy experimentation
- Challenge-based ideation sessions
- Designing and conducting RCTs
- Data science methods for science, innovation and industrial policy
- Theory of change development



1-day face-to-face introductory workshop to policy experimentation with ideation session and trial design work



Capacity building and ideation <u>online</u> <u>workshop series</u> for Latin American government agencies working on digital transformation



One-week intensive training programme on <u>novel data</u> <u>science methods for</u> <u>industrial and</u> <u>innovation policy</u>

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Project consulting & advisory

We regularly advise government agencies and support them to identify opportunities to design more impactful programmes, build experimental cultures, set up policy experiments, develop data science & AI projects, and undertake other types of research and advisory activities.



No Limits: Innovate UK is leading efforts to make the UK's innovation system more inclusive and diverse, and break down barriers in innovation. IGL supported IUK to embed experimental principles within this programme, and to identify specific opportunities to run learning experiments within it.



SBIR: The NASA Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programme supports innovative businesses. IGL helped the NASA SBIR team to build a more experimental culture and identify experimental opportunities to improve the execution of the programme.



Unlocking the potential of EIC data: The European Innovation Council is interested in extracting value from the data it collates to improve its impact. IGL is mapping data-prone problem-spaces at the EIC, developing data pilots using cutting-edge approaches, and facilitating peer-learning.

Experimentation funds



We collaborate with governments to set up and deliver <u>experimentation funds</u> that identify, develop and test new policy ideas and programmes in order to find more cost-effective approaches to address a policy challenge.



Business Basics

An experimentation fund set up by the UK's Department for Business and Trade in partnership with Innovate UK and IGL. It has facilitated <u>32 trials</u> <u>and pilots</u> testing different interventions to encourage SMEs in England to adopt existing technology and management practices.



INNOSUP Fund

We have supported the European Commission and 27 national and regional agencies that received <u>INNOSUP funding</u> to set up policy experiments testing new solutions to promote innovation and productivity.

Joining an IGL initiative



IGL initiatives bring together leading organisations, researchers, practitioners and funders to ideate, develop, test and scale **cost-effective solutions to address key challenges**.

- → Diagnosing the problem and solution space through evidence reviews, mapping studies, data analysis and stakeholder workshops.
- → **Developing** a portfolio of experimental and/or data projects that build the evidence base and provide actionable insights.
- → **Scaling** the lessons learnt through stakeholder engagement, publications and events, achieving demonstrable impact at scale.

Governments can provide funding and/or in-kind support, and help shape and deliver the work it does. We can also collaborate with governments interested in setting up new joint initiatives targeting their priority challenges, or willing to support and/or sponsor IGL projects aligned with their objectives. Accelerating science commercialisation and business-university collaboration

Recovering **lost innovative potential** to build more inclusive innovation ecosystems

Greening businesses through faster adoption of green & digital technologies & practices



Project spotlights

Helping organisations that drive innovation

Mapping Innovation Agencies

In partnership with the <u>Taftie</u> and <u>RELAI</u> networks of innovation agencies in Europe and Latin America, we have <u>mapped</u> the characteristics, roles and activities of more than 50 innovation agencies worldwide, and supported them to think about the culture, capabilities and tools they need to develop in order to be experimental, innovative, and impactful.



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Experiment Task Force

We have supported innovation agencies across Europe's Taftie network to gain experience in experimental approaches through 'learning by doing'. Through a dedicated <u>two-year task force</u>, 17 agencies explored and developed ideas for setting experiments in motion within their own programmes.

Supporting high-impact experimental research

Building an experimental research community

We've supported the <u>IGL Research Network</u>, with over 100 researchers from around the world, with funding, trial design advice, matching with implementing partners, dissemination activities, and events (such as the IGL conferences, research meetings, PhD workshops and <u>CFXS</u>).





MANAGEMENT SCIENCE Advance Advances on 1 47

A Scientific Approach to Entrepreneurial Decision Making: Evidence from a Randomized Control Trial

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IGL Grants Programme

First funding programme (\$3 million) specifically focused on RCTs in this field, supporting <u>42 trials</u> with funding and advice. Enabled many researchers to run their first RCTs, showcased to governments the feasibility and potential of trials in this space, and made crucial contributions to the evidence base.

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Promoting policy experimentation

The experimental research funder's handbook

We are collaborating with the Research on Research Institute (RoRI) and its global consortium of science funders to <u>develop a portfolio of policy experiments</u> to improve science funding processes.





Commission

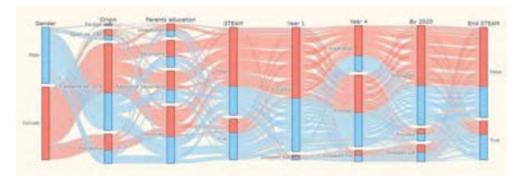
Embedding experimentation in the European Commission We are <u>collaborating with DG RTD</u> to incorporate policy experimentation as a pillar in the next Framework Programme and supporting the EU missions by testing different approaches to increase citizens' engagement in them.

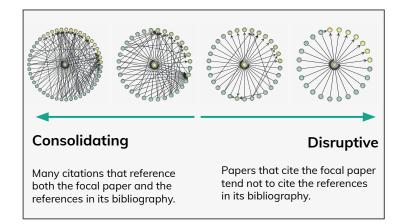


Leveraging data science for innovation

Innovation policy and strategic foresight

Collaboration with ARIA, the UK's Advanced Research and Invention Agency, to identify disruptive innovation by leveraging data science and network analysis. We identified areas where patents and publications were not aligned, developing indicators to identify disruptive research emerging areas and key individuals and institutions contributing the most disruptive research.





Lost innovative potential

Analysed the pipeline of lost innovative potential in the city of Barcelona, using local data to provide relevant insights regarding the problematic and linking it to promising interventions to reduce the innovation gap.



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